ENVIRONMENTAL PROTECTION AGENCY

SMALL BUSINESS INNOVATION RESEARCH PROGRAM SOLICITATION

PR-NC-01-11634

PHASE II

ISSUE DATE: March 1, 2001

CLOSING DATE: April 19, 2001

*CAUTION - See Section VII., Paragraph 10(c)(3), Instructions to Offerors, concerning late proposals and modifications.

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PHASE II SOLICITATION FOR SMALL BUSINESS INNOVATION RESEARCH

I. PROGRAM DESCRIPTION

A. INTRODUCTION

The Environmental Protection Agency invites you to submit a Phase II proposal under the Small Business Innovation Research Program for the same technology funded under either the EPA FY 1999 Phase I Solicitation (No. PR-NC-98-12211/Closing Date - November 19, 1998) or the EPA FY 2000 Phase I Solicitation (No. PR-NC-99-13350/Closing Date - October 13, 1999). (See B. below for exactly which firms are eligible.) Funding for Phase II shall be based upon the results during and after Phase I, the scientific and technical merit of the Phase II proposal, the commercial potential of the Phase II proposal, program balance and critical Agency requirements.

B. SBIR PROGRAM PHASES

The SBIR Program is a uniform process of soliciting proposals and awarding funding agreements for research (R) or research and development (R&D) for cutting-edge research on advanced concepts that address EPA priority needs. The EPA program follows the SBIR program's uniform competitive process. THIS SOLICITATION IS FOR PHASE II PROPOSALS ONLY.

Companies submitting unsuccessful Phase II proposals under the previous Phase II solicitation (No. PR-NC-00-10447/Closing Date - May 4, 2000) are eligible to submit proposals in response to this Phase II Solicitation. However, if their Phase II proposal is not successful, these companies will NOT be eligible for future Phase II Solicitations. Companies awarded Phase I contracts under the previous Phase I Solicitation (No. PR-NC-99-13350) and submitting unsuccessful proposals under this solicitation will be eligible to submit a revised proposal of the same technology under the next Phase II solicitation (approximate opening date is October 2, 2001).

The phases of the SBIR program and the Phase II Option are described below.

- (1) PHASE I. Phase I involves a solicitation of proposals to conduct feasibility related experimental or theoretical research or R&D efforts on described agency requirements. The object of this phase is to determine the technical feasibility of the proposed effort and the quality of performance of the small firm with a relatively small agency investment before consideration of further Federal support in Phase II.
- (2) PHASE II. Phase II is the principal research or R&D effort

leading to commercialization. The object is to continue the research or R&D initiated under Phase I and work toward commercialization of the technology. Phase II awards are expected to result in technology prototypes, or the initial commercial technology application. However, Phase II may not necessarily complete the total research and development needed to fully commercialize the technology.

(3) PHASE II OPTION. This solicitation includes a Phase II Option under which Phase II offerors may submit a proposal for additional funding to expand Phase II R&D efforts to accelerate commercialization (see Section IV.D. Phase II Option). The purpose of the additional funding is to accelerate the project to the commercialization stage. EPA federal funds must be designated strictly for advancing the research related elements of the project. The Government will evaluate Phase II proposals in accordance with the criteria specified in Section V. No automatic preference shall be given to offers which address the option; however, in the case where an offeror addresses the option in its proposal, the entire proposal including the option shall be evaluated. The Government is not obligated to fund any specific Phase II proposal.

C. ELIGIBILITY

Each offeror submitting a Phase II proposal must still qualify as a small business for research or R&D purposes at the time of a Phase II award. In addition, the primary employment of the principal investigator must be with the small business firm at the time of award and during the conduct of the proposed research. Principal investigators who appear to be employed by a university must submit a letter from the university stating that the principal investigator, if awarded an SBIR contract, will become a less-than-half-time employee of the university. Also, a principal investigator who appears to be a staff member of both the applicant and another employer must submit a letter from the second employer stating that, if awarded an SBIR contract, he/she will become a less-than-half-time employee of such organization. For Phase II, a minimum of one-half of the research and/or analytical effort must be performed by the proposing small business concern unless otherwise approved in writing by the Contracting Officer. Also, the research or R&D work must be performed in the United States. "United States" means the 50 States, the Territories and possessions of the United States, the Commonwealth of Puerto Rico, the Trust Territory of the Pacific Islands, and the District of Columbia.

D. INQUIRIES

All inquiries concerning this solicitation shall be referred to the EPA Contract Specialist:

Marsha Johnson
U.S. Environmental Protection Agency
Contracts Management Division (MD-33)
Research Triangle Park, North Carolina 27711

Phone: (919) 541-0952

E-mail: johnson.marsha@epa.gov

II. Contract Awards

A. PHASE II BASIC CONTRACT

The Government anticipates the award of approximately \$3.0 M in firm fixed price contracts at approximately \$225,000 each including profit, but reserves the right to change either the number of awards or the amount of the individual awards depending on the outcome of the selection process. The contractor may propose a period of performance not to exceed two years. Award of any contract(s)resulting from this solicitation shall be to the responsible offeror(s) with the highest rankings after evaluation in accordance with Section V. Source selection will not be based on a comparison of cost or price. However, cost or price will be evaluated to determine whether the price, including any proposed profit, is fair and reasonable and whether the offeror understands the work and is capable of performing the contract.

B. PHASE II CONTRACT OPTION TO ACCELERATE COMMERCIALIZATION

Offerors that submit a proposal for the Phase II Option may be awarded contracts inclusive of an option to expand R&D efforts beyond the original Phase II requirements. Inclusion of this option does not obligate the Government to exercise this option. The maximum amount of the contract option is \$70,000. The following conditions apply to the Phase II contract option:

(1) THIRD PARTY FUNDING. Prior to EPA's determination to exercise this option, the contractor must provide evidence of funding of at least \$100,000 from a third party as defined in Section III. K and L, for support during the Phase II contract. (Note that third party investors include such entities as a venture capital firm, an individual "angel" investor, bank or financial institution, or another company under a prototype

testing or demonstration agreement or a partnership, licensing or joint venture arrangement. In-kind provision of equipment or services from a third party does not qualify as third party investment. Also, self financing does not qualify as third party investment and third party investors do not include owners of the small business, their family members, and/or "affiliates" of the small business.)

(2) DOCUMENTATION/DEADLINE. Before EPA exercises the option, the contractor must submit proof showing that the third party fulfilled its commitment. EPA may unilaterally exercise the option only upon receipt of a letter indicating that the entire amount of the funds from the third party investor have been transferred to the company. The letter must be accompanied by documentation of the deposit or credit transaction showing that the funds have been deposited. The letter must specifically state that \$(commitment \$)\$ has been transferred to (SBIR Firm Name) from the following third-party investor(s): (List names and itemized amounts if more than one) in accord with the SBIR Phase II contract procedures, and for purposes related to work being performed under EPA SBIR Contract Number _________."

The letter can be submitted to EPA with the Phase II proposal or anytime up to the deadline. The deadline for receipt of this letter by EPA is: 4:30 p.m. local time, July 31, 2002. Offerors are encouraged to submit the letter and funding documentation as early as possible in order to facilitate the Government's review of the documentation and determination on whether the option will be exercised. EPA will not consider any submissions regarding evidence of third party funding that are received after 4:30 p.m. on July 31, 2002. Receipt of the required documentation does not obligate the Government to fund the option.

- (3) ADDITIONAL R/R&D. The additional technical work being performed in the Phase II Option must be an expansion of the technical work being performed in the basic Phase II project. While the EPA Phase II Option funds must be used for the proposed new R&D efforts, the third party funds can be used for prototype testing, demonstration or other R&D and/or commercialization efforts including market research, advertising and understanding or targeting your customer's needs, patent support, leveraging/pursuing strategic or financial investors, testing the market, or business planning. The EPA Phase II Option funds must be expended during the Phase II period of performance.
- (4) THE EPA OPTION. EPA's Phase II Option is **NOT** the same as

the SBIR "FAST TRACK" program of the Department of Defense or the National Science Foundation's "Follow-on Funding", or "Phase II-B". There are some similarities between the EPA Option and elements of these programs. However, there are also important differences. In this solicitation, neither self-financing nor in-kind services or equipment qualify as third party investment. Please read this solicitation carefully.

(5) EXERCISING THE OPTION. The Government may unilaterally exercise this option upon contract award or at any time during the first 15 months of the contract period of performance. If satisfactory documentation is provided in the Phase II proposal, the option may be exercised at the time of initial Phase II contract award.

III. DEFINITIONS

For purposes of this solicitation, the following definitions apply:

- A. R/R&D. Research or Research and Development is any activity that is:
- (1) A systematic, intensive study directed toward greater knowledge or understanding of the subject studies.
- (2) A systematic study directed specifically toward applying new knowledge to meet a recognized need.
- (3) A systematic application of knowledge toward the production of useful materials, devices, and systems or methods, including design, development, and improvement of prototypes and new processes to meet specific requirements.
- B. FUNDING AGREEMENT. Any contract, grant, or cooperative agreement entered into between any Federal Agency and any small business for the performance of experimental, developmental, or research work funded in whole or in part by the Federal Government.
- C. SUBCONTRACT. Any agreement, other than one involving an employer-employee relationship, entered into by a Federal Government funding agreement awardee calling for supplies or services required solely for the performance of the original funding agreement.
- D. SOCIALLY AND ECONOMICALLY DISADVANTAGED SMALL BUSINESS. A

socially and economically disadvantaged small business concern is one that is:

- (1) At least 51 percent owned by (i) an Indian tribe or a native Hawaiian organization, or (ii) one or more socially and economically disadvantaged individuals.
- (2) Whose management and daily business operations are controlled by one or more socially and economically disadvantaged individuals.
- E. SOCIALLY AND ECONOMICALLY DISADVANTAGED INDIVIDUAL. A socially and economically disadvantaged individual is defined as a member of any of the following groups:
- (1) Black Americans
- (2) Hispanic Americans
- (3) Native Americans (American Indians, Eskimos, Aleuts, or Native Hawaiians);
- (4) Asian-Pacific Americans (persons with origins from Burma, Thailand, Malaysia, Indonesia, Singapore, Brunei, Japan, China, Taiwan, Laos, Cambodia (Kampuchea), Vietnam, Korea, The Philippines, U.S. Trust Territory of the Pacific Islands (Republic of Palau), Republic of the Marshall Islands, Federated States of Micronesia, the Commonwealth of the Northern Mariana Islands, Guam, Samoa, Macao, Hong Kong, Fiji, Tonga, Kiribati, Tuvalu, or Nauru);
- (5) Subcontinent Asian (Asian-Indian) Americans (persons with origins from India, Pakistan, Bangladesh, Sri Lanka, Bhutan, the Maldives Islands, or Nepal);
- (6) Other groups designated from time to time by SBA pursuant to Section 124.103 of the 13 CFR Ch.1 (1-1-99 Edition).
- F. SMALL BUSINESS. A small business concern is one that at the time of award of Phase I and Phase II is:
- (1) Independently owned and operated, NOT dominant in the field of operation in which it is proposing, has its principal place of business located in the United States, and is organized for profit;
- (2) Is at least 51 percent owned, or in the case of a publicly owned business, at least 51 percent of the voting stock is owned by United States citizens or lawfully admitted permanent resident aliens; (if this applies, appropriate documentation must be submitted);

- (3) Has, including its affiliates, a number of employees not exceeding 500, and meets the other regulatory requirements found in 13 CFR Part 121. Business concerns, other than investment companies licensed, or state development companies qualifying under the Small Business Investment Act of 1958, 15 U.S.C., 661, et. seq., are affiliates of one another when either directly or indirectly (A) one concern controls or has the power to control the other; or (B) a third party or parties controls or has the power to control both. Control can be exercised through common ownership, common management, and contractual relationships. The term "affiliates" is defined in greater detail in 13 CFR 121.3-2(a). The term "number of employees" is defined in 13 CFR 121.3-2(t). Business concerns include, but are not limited to, any individual, partnership, corporation, joint venture, association or cooperative.
- G. WOMEN-OWNED SMALL BUSINESS CONCERN. A small business concern that is at least 51 percent owned by a woman or women who also control and operate it. "Control" in this context means exercising the power to make policy decisions. "Operate" in this context means being actively involved in the day to day management.
- H. PRIMARY EMPLOYMENT. At least one-half of the principal investigator's time is spent in the employ of the small business.
- I. UNITED STATES. The 50 States, the Territories and possessions of the United States, the Commonwealth of Puerto Rico, the Trust Territory of the Pacific Islands, and the District of Columbia.
- J. COMMERCIALIZATION. The process of developing markets and producing and delivering products for sale (whether by the originating party or by others); as used here, commercialization includes both government and commercial markets.
- K. THIRD PARTY INVESTORS. Third party investors may include such entities as a venture capital firm, an individual "angel" investor, bank or financial institution, or another company under a prototype testing or demonstration agreement or a partnership, licensing or joint venture arrangement or any combinations of the above. Self financing and in-kind services and equipment do not qualify. Bank or other loans must be associated with developing and commercializing the SBIR project technology. Third Party Investors do not include owners of the small business, their family members, and/or "affiliates" of the small business awardee, as defined in Title 13 of the Code of Federal

Regulations (C.F.R.), Section 121.103. As discussed in that section, concerns are affiliates of each other when one concern controls or has the power to control the other, or a third party or parties controls or has the power to control both. Factors such as ownership, management, previous relationships with or ties to another concern, and contractual relationships, can be considered in determining whether affiliation exists. Individuals or firms that have identical or substantially identical business or economic interests, such as family members, persons with common investments, or firms that are economically dependent through contractual or other relationships, may be treated as one party with such interests aggregated.

L. THIRD PARTY INVESTMENT. The purpose of Third Party Investment is to accelerate Phase II commercialization. Third Party Investment can include proof of the bank transaction showing that the third party has exercised its commitment. EPA also allows bank and other loans where they are directly linked to the Phase II technology. The loan agreement linking the loan to the technology must be provided to EPA as documentation. Third Party Investment from partner companies must document dollar amounts and methods showing how these resources are provided to the SBIR company. Self financing and in-kind equipment or in-kind services do NOT qualify as third party investment under this solicitation. Also, claims for lost production or expenses associated with trade shows do not qualify as third party investment.

Third Party Investment documentation should also include a plan or schedule showing how and when the \$100,000 of third party resources will be expended. Offerors are encouraged to expend the third party resources during Phase II. The last commercialization plan required as part of the final report should indicate how the \$100,000 of third party funding was expended during Phase II and how the third party funding commitment accelerated commercialization of the Phase II technology.

IV. PROPOSAL PREPARATION INSTRUCTIONS AND REQUIREMENTS

A. PROPOSAL COVER SHEET

The offeror shall complete the Proposal Cover Sheet (Appendix 1) as page 1 of each copy of each proposal. No other cover is permitted. All pages must be consecutively numbered. The original of the cover sheet must contain the pen-and-ink signatures of the authorized negotiator and the person authorized

to sign the proposal.

B. ABSTRACT OR SUMMARY

The offeror shall complete the Project Summary form (Appendix 2) as page 2 of each proposal. The technical abstract should include a brief description of the problem or opportunity, the innovation, project objectives, description of the effort, and the results of Phase I (see Part C.2 below). In summarizing anticipated results, the implications of the approach and the potential commercial applications of the research shall be stated. THE ABSTRACT IS USED EXTENSIVELY DURING THE EXTERNAL PEER REVIEW AND EPA INTERNAL REVIEW. The project summary of the successful proposals will be published by EPA and, therefore, must not contain proprietary information.

C. TECHNICAL CONTENT: BASIC PHASE II PROPOSAL

The basic Phase II technical proposal is described below. As mentioned earlier in this solicitation, EPA is offering a Phase II Commercialization Option where EPA will provide additional funding to expand R&D efforts to meet the product or process requirements of a third party investor. The purpose of the additional funding is to accelerate the project to the commercialization stage. In order to apply for EPA funding under the Phase II option, offerors must submit a proposal as described in Section D. This section of the proposal should appear immediately after the standard Phase II technical proposal described below and before Attachment 1 (Phase I Final Report). The technical and financial proposals for the option are described below in Section D.

Begin the main body of the <u>basic</u> Phase II technical proposal on page 3. Note that there are five attachments required as part of the complete Phase II proposal as follows:

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Attachment 1: Phase I Final Report (See Section F);
Attachment 2: Commercialization Plan (See Section G);
Attachment 3: Phase II Quality Assurance Plan (Section H);
Attachment 4: Cost Breakdown/Proposed Budget(See Section I);
Attachment 5: Representations/Certifications(See Section J).
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The main body of the technical proposal should contain sections that, at a minimum, respond to each of the following requirements:

- (1) Identification and Significance of the Problem or Opportunity. A clear statement of the specific technical problem or opportunity addressed.
- (2) Provide a summary/discussion of the Phase I objectives and Phase I results, including a comparison/discussion of these objectives/results with the Phase II specific objectives and expected results. Any new results since the submission of the Phase I Final Report should be reported in this section. NOTE: The Phase II proposal must include a copy of the Phase I Final Report. This section of the proposal should be a brief summary of the key Phase I findings and results and new results, if any, since the submission of the Phase I Final Report. (See Section E below.)
- (3) Phase II Work Plan. Provide a detailed description of the Phase II R/R&D plan. The plan should indicate what will be done, where it will be done and how the R/R&D will be carried out. The work planned to achieve each objective or task should be discussed in detail, to enable a complete scientific and technical evaluation of the work plan. A work schedule should also be provided.
- (4) Related Research or R&D. Describe significant research or R&D that is directly related to the proposal including any conducted by the project manager or principal investigator or by the proposing firm. Describe how it relates to the proposed effort, and any planned coordination with outside sources. The proposer must persuade reviewers of his/her awareness of recent research or R&D conducted by others in the specific topic area.
- (5) Key Personnel and Bibliography of Directly Related Work. Identify key personnel involved in Phase II including their directly related education, experience, and bibliographic information. Where vitae are extensive, summaries that focus on the most relevant experience or publications are desired.
- (6) Consultants. Involvement of consultants in the planning and research stages of the project is permitted. Offerors are encouraged to allow up to \$4,000 of SBIR funds per year for consultant services associated with commercialization. Monies proposed for commercialization assistance should be included in the offeror's proposed total price, which is not to exceed \$225,000. The proposal should describe in detail how these services will be used.
- (7) Commercialization Plan. Provide a brief summary of the

important elements of the Commercialization Plan. <u>Note: The Phase II Proposal must include a copy of the Commercialization Plan. This section is only a brief summary of the plan. (See Section F below.)</u>

- (8) Similar or Closely Related SBIR Awards. If the small business concern has received ANY prior Phase I or Phase II award(s) from EPA or any Federal agency for similar or closely related research in the prior 5 fiscal years, submit name of awarding agency, date of award, funding agreement number, amount, topic or subtopic title, follow-on agreement amount, source and date of commitment and current commercialization status.

 DESCRIBE THE TECHNICAL DIFFERENCES AND REASONS WHY THE PROPOSED NEW PHASE II RESEARCH IS DIFFERENT FROM RESEARCH CONDUCTED UNDER PRIOR SBIR AWARDS.
- (9) Duplicate or Equivalent SBIR Proposals. A firm may elect to submit essentially equivalent work under other Federal Program Solicitations. In these cases, a statement must be included in each such proposal indicating: the name and address of the agencies to which proposals were submitted or from which awards were received; date of proposal submission or date of award; title, number, and date of solicitations under which proposals were submitted or awards received; specific applicable research topics for each proposal submitted or award received; titles of research projects; name and title of project manager or principal investigator for each proposal submitted or award received.
- (10) Prior SBIR Phase II Awards. If the small business concern has received <u>ANY</u> Phase II award from any Federal agency in the prior 5 fiscal years, submit name of awarding agency, date of award, funding agreement number, amount, topic or subtopic title, follow-on agreement amount, source and date of commitment and current commercialization status for each Phase II.

D. PHASE II OPTION

EPA Phase II offerors are **NOT required** to submit a proposal for the Phase II Option. Offerors who are interested in the Phase II option must address the option as detailed below. The option proposal will be reviewed and evaluated at the same time as the Basic Phase II proposal. Each proposal in its entirety (basic plus option if option is proposed) will be evaluated in accordance with Section V.B and C. Offerors must address the following if they are seeking the optional funding:

(1) Technical proposal including a brief description of the

expanded R&D activity to be performed, milestone time-line chart, and a new Phase II work plan which indicates the additional work which is planned.

- (2) At least ONE of the following should be included with the option proposal:
 - (a) Documentation showing that \$100,000 of funding has been received from the third party;
 - (b) A signed original third party commitment letter; or
 - (c) A brief description of the expected third party investment, including what activities are to be conducted and the form and total amount of the third party financial commitment (minimum \$100,000).
- (3) Attachment 4-A, Cost Breakdown/Proposed Budget Sheet for the option.

The additional work proposed under the Phase II Option must be an expansion of the technical work being performed in the basic Phase II project. While the EPA funds must be used for the proposed new R&D efforts, the third party funds can be used for prototype testing, demonstration or other R&D and/or commercialization efforts, including market research, advertising and understanding or targeting your customer's needs, patent support, leveraging/pursuing strategic or financial investors, testing the market and business planning. Contractors should plan to expand and accelerate the total Phase II R&D over the basic Phase II contract period (2 years maximum).

Prior to the Government's determination to exercise the option, the contractor must provide the required documentation to show that at least \$100,000 of funding has been received from a third party as defined in Section III.K. of this solicitation, for support during the Phase II contract. (Note that third party investors can include such entities as a venture capital firm, an individual "angel" investor, bank or financial institution, or another company under prototype testing or demonstration agreement or a partnership, licensing or joint venture arrangement, or any combination of the above. Self-financing and in-kind equipment/services do not qualify as third party investment and third party investors do not include owners of the small business, their family members and/or "affiliates" of the small business.)

E. OPTION DOCUMENTATION AND DEADLINE.

EPA may unilaterally exercise the option only upon receipt of a letter indicating that the entire amount of the funds/resources from the third party investor have been transferred/committed to the company. The letter must be accompanied by documentation of the deposit or credit transaction showing that the funds have been deposited. The letter must specifically state that \$(commitment) has been transferred to (SBIR Firm Name) from the following third-party investor(s): (List names and itemized amounts if more than one) in accord with the SBIR Phase II contract procedures, and for purposes related to work being performed under EPA SBIR Contract Number ______."

The deadline for receipt of this letter and all documentation is July 31, 2002. Offerors should submit the documentation to the addressees designated in Section IX of this solicitation. Offerors are encouraged to submit the letter and funding documentation as early as possible in order to facilitate the Government's review of the documentation and determination on whether the option will be exercised. EPA will not consider any submissions regarding evidence of third party funding that are received after 4:30 p.m. on July 31, 2002. Receipt of the required documentation does not obligate the Government to fund the option.

F. ATTACHMENT 1: PHASE I FINAL REPORT

The SBIR Phase I Final Report (submitted under either the FY 1999 or FY 2000 Phase I contract) is required to be submitted as Attachment 1 of the Phase II proposal. Key Phase I findings and results needed to understand the potential of the Phase II research should be summarized in Section C(2) of the technical proposal.

G. ATTACHMENT 2: COMMERCIALIZATION PLAN

Provide a commercialization plan related directly to producing an innovative product, process or device and getting it into commercial production and sales. Comprehensive business plans (that are company rather than project oriented) are not desired. While the results of the Phase I commercialization technical assistance provided by EPA to each SBIR Phase I company are important to the commercialization plan, it is anticipated that the company will utilize this information for preparing the Commercialization Plan rather than simply submitting the technical assistance product as Attachment 2. Key elements of

the commercialization plan needed to understand the potential of the Phase II research should be summarized in Section C(7) of the technical proposal. The Commercialization Plan should contain sections that, at a minimum, respond to each of the following requirements:

- (1) Company: Brief description of the company, its principal field(s) of interest, size and current products and sales.
- (2) SBIR Project: A concise description of the project and its key technical objectives.
- (3) Commercial Applications: Potential commercial applications of the research results specifying customers and specific needs which will be satisfied.
- (4) Patent Status: Do you have or intend to file for one or more patents as a result of the SBIR project?
- (5) Innovation: What is particularly innovative about the anticipated technology or products? (Innovation may be expressed in terms of applications, performance, efficiencies or reduced cost.)
- (6) Competitive Advantages: What significant advantages in application, performance, technique, efficiency, or costs, do you anticipate your new technology will have over existing technology?
- (7) Markets: What are the anticipated specific markets for the resulting technology, their estimated size, classes of customers, and your estimated market share five years after the Phase II project is completed and/or first sales?
- (8) Competition: Who are the major competitors in the markets, present and/or anticipated?
- (9) Production Plan: Briefly describe how you plan to produce your product. Do you intend to manufacture it yourself, subcontract the manufacturing, enter into a joint venture or manufacturing agreement, license the product, etc.? When do you anticipate doing so?
- (10) Marketing Plan: Briefly describe the approach and steps you plan to take to commercialize the research results from the end of Phase II to significant sales. Do you plan to market the product yourself, through dealers, contract sales, marketing

agreements, joint venture, sales representatives, foreign companies, etc.?

- (11) Financing Plan: Briefly describe your plan to raise money to support your commercialization plan. In describing any arrangements for non-Federal capital commitments, the proposal must include the following:
 - (a) The name and address of commercial firm
 - (b) Nature of arrangements
 - (c) Amount
 - (d) Degree of formality
 - (e) Conditions of arrangements
 - (f) Any available written evidence of third party agreement
 - (g) Funding Commitment(See Section VII for more information)

H. ATTACHMENT 3: PHASE II QUALITY ASSURANCE PLAN

In your proposal provide a summary paragraph describing expected key elements of the Phase II Quality Assurance Plan and steps that will be taken to prepare the plan. The Proposed Quality Assurance Plan is required with the first monthly report.

Phase II awardees must provide with their first monthly report information on whether or not their research involves technology-specific testing or environmentally related measurements. If it does, a quality system is required. This Phase II <u>Quality Assurance Plan</u> should, for each item listed below, either present the required information or explain why the item does not apply to the proposed research.

- (1) The activities to be performed or hypothesis to be tested (reference may be made to the specific page and paragraph number in the application where this information may be found); criteria for determining the acceptability of data quality in terms of precision, accuracy, representativeness, completeness, comparability. (Note: these criteria must also be applied to determine the acceptability of existing or secondary data to be used in the project.)
- (2) The study design including sample type and location requirements and statistical analyses that were used to estimate the types and numbers of samples required for physical samples or similar information for studies using survey and interview techniques.
- (3) The procedures for the handling and custody of samples, including sample identification, preservation, transportation,

and storage.

- (4) The procedures that will be used in the calibration and performance evaluation of the sampling and analytical methods used or equipment developed during the project.
- (5) The procedures for data reduction and reporting, including a description of statistical analyses to be used and of any computer models to be designed or utilized with associated verification and validation techniques.
- (6) The quantitative and/or qualitative procedures that will be used to evaluate the success of the project, including any plans for peer or other reviews of the study design or analytical methods prior to data collection.

I. ATTACHMENT 4: PHASE II COST BREAKDOWN/PROPOSED BUDGET

Complete the Budget form (see Appendix 3), and photocopy the form for the required 9 copy submission. Incorporate the copy of the budget form bearing the original signature into the copy of the proposal bearing the original signature on the cover page. If applying for the Phase II Option, also complete Attachment 4-A to reflect costs for the option.

J. ATTACHMENT 5: REPRESENTATIONS AND CERTIFICATIONS

Attachment 5 (see Appendices 4 and 5) is a Representations and Certifications Package. Please fill out completely, sign, and return with the proposal. Completion of this package is required before any award can be made. Failure to complete fully and sign this package could delay award.

K. ADDITIONAL PHASE II EPA PARTNERSHIP OPPORTUNITIES

The EPA Environmental Technology Verification (ETV) Program may help companies plan SBIR Phase II activities. The ETV Program is designed to facilitate the deployment of innovative environmental technologies through performance verification and information dissemination. ETV verifies the performance of new, commercially-ready environmental technologies through the evaluation of objective and quality assured data so that potential purchasers, users and permitters are provided with an independent and credible assessment of what they are buying. SBIR Phase II companies may be interested in ETV partnerships to help them commercialize new technologies.

For information on the ETV Program, visit the Website,

http://www.epa.gov/etv. There are ETV partnership programs for drinking water systems, pollution prevention, indoor air products, climate change and site characteristics and monitoring technologies. One of the ETV partners, the Civil Engineering and Research Foundation, operates the Environmental Technology Evaluation Center (http://www.cerf.org/evtec).

V. METHOD OF SELECTION AND EVALUATION CRITERIA

All Phase II proposals will be evaluated on a competitive basis. Each proposal will be judged on its own merit. No automatic preference shall be given to offers which address the Phase II Commercialization Option versus those that do not. However, offers will be evaluated in their entirety using the criteria specified below. The Agency is under no obligation to fund any proposal or any specific number of proposals in a given topic. It also may elect to fund several or none of the proposed approaches to the same topic or subtopic.

A. TECHNICAL EVALUATION CRITERIA

All Phase II proposals will be evaluated and judged on a competitive basis by an external peer review panel of technical experts. All peer reviewers will be required to sign an agreement to protect the confidentiality of all proposal material. A copy of the confidentiality agreement is available upon request. The external peer review panel will review all proposals using the technical evaluation criteria described in Section B. Based on this review, the panel will assign adjectival ratings of "Highly Recommended", "Recommended" or "Not Recommended" to each proposal. EPA program managers will then rank all "Highly Recommended" and "Recommended" proposals based on program priorities, balance and relevancy.

B. EXTERNAL PEER REVIEW

Phase II proposals will be evaluated in accordance with the following Phase II peer review criteria to review the significance of Phase I results and the scientific and technical merit and commercial potential of the technology proposal. The peer review criteria are of $\underline{\text{equal}}$ importance.

PHASE II PEER REVIEW CRITERIA

 The scientific and technical quality and significance of the proposed technology as applied R/R&D.
 Credibility and overall soundness of the research plan to establish the technical and commercial feasibility

- of the proposed concept as evidenced through technology prototypes or initial commercial demonstrations.
- The originality, uniqueness, and ingenuity of the proposed concept as a technologically innovative and commercially viable application as evidenced through technology prototypes or initial commercial demonstrations.
- 3. Results of Phase I and degree to which research objectives and identified customer needs were met. Demonstration of performance/cost effectiveness and environmental benefits associated with the proposed research, including risk reduction potential.
- 4. Qualifications of the principal/key investigator, supporting staff and consultants. Time commitment of principal/key investigator, adequacy of equipment and facilities and proposed budget to accomplish the proposed research. Adequacy of Phase II Quality Assurance Summary.
- Potential of the proposed concept for significant commercialization applications. The quality and adequacy of the commercialization plan to produce an innovative product, process or device and getting technology prototypes or initial Phase II applications into commercial production and sales. Expected market and competition and other financial/business indicators of commercialization potential and the offeror's SBIR or other research commercialization record.

C. EPA RELEVANCY REVIEW

Phase II proposals that receive ratings of "Highly Recommended" and "Recommended" by the external peer review panel will be subject to the relevancy review by EPA program managers using the Phase II relevancy review criteria described below to select which of the "Highly Recommended" and "Recommended" proposals will be funded. Projects will not be funded where EPA determines the proposed research is already being supported by EPA or another known source. The relevancy review criteria are of equal importance.

PHASE II RELEVANCY REVIEW CRITERIA

1. The potential of the Phase II technology to meet Agency program priorities and to strengthen the overall

balance of the SBIR program. How well the technology fits into EPA's overall research strategy.

- 2. The potential of the Phase II technology for significant environmental benefits and for strengthening the scientific basis for risk assessment/risk management in the Agency research topic area.
- 3. The potential of the Phase II technology to have broad application or to impact large segments of the population.

D. RELEASE OF PROPOSAL REVIEW INFORMATION.

After final award decisions have been announced, the technical evaluations will be provided to the proposer. The identity of the reviewer shall not be disclosed.

VI. CONTRACTUAL REQUIREMENTS

A. PHASE II CONTRACT REPORTING REQUIREMENTS

(1) During the duration of the contract, the contractor shall furnish two (2) copies of a monthly letter report stating progress made. One (1) copy of the report shall be submitted to the Project Officer with one (1) copy to the Contract Specialist. The reports shall be submitted within 7 calendar days after the end of the reporting period. Specific areas of interest shall include progress made and difficulties encountered during the reporting period, and a statement of activities anticipated during the subsequent reporting period. The report shall include any changes in personnel associated with the project. Also, the first month's report shall contain a work plan and schedule of accomplishments for the subsequent months of the project. The Monthly Report shall include, as an attachment, a copy of the monthly voucher for same period.

If the Phase II Option is executed by contract modification, the contractor will be required to report R/R&D and commercialization progress associated with the Option, including progress using EPA SBIR funds and progress from the third party investment. The monthly report must indicate expenditures of SBIR and third parties during the monthly reporting period.

(2) The first monthly report must also include a copy of the Phase II Proposed Quality Assurance Plan. Phase II awardee must provide information on whether or not their research involves

technology-specific testing or environmentally related measurements. If it does, a quality system must be described that complies with applicable requirements. (See Part IV, Section H).

- (3) Three copies of a comprehensive final report on the Phase II project must be submitted by the final completion date of the contract. Two copies must be provided to the Project Officer and one copy to the Contract Specialist. This final report shall include a single-page project summary as the first page, identifying the purpose of the research, a brief description of the research carried out, the research findings or results, and commercial applications of the research in a final paragraph. The balance of the report should indicate in detail the research objectives, research work carried out, results obtained, and estimates of technical feasibility. A copy of the latest commercialization plan developed during Phase II shall be included in the final report.
- (4) Two hard copies (and one copy on a disk in WP 6.1 or ASCII format) of a publishable (cleared for the general public) 2-3 page executive summary of the final report for Phase II must be submitted to the Project Officer by the completion date of the contract. This special report should be a true summary of the report, including the purpose of the project, work carried out and results. The summary should stress innovation and potential commercialization. The executive summary will be placed on the EPA SBIR Website and therefore, it should include the specific results the company is willing to release to the public.

B. PAYMENT SCHEDULE

Monthly progress payments will be allowed for SBIR Phase II contractors at a maximum rate of 85% of total costs incurred for each reporting period. The remainder shall be paid upon receipt and acceptance of the final report. Pursuant to the provisions of FAR 52.232-25, PROMPT PAYMENT (June 1997), payment will be rendered within thirty (30) days after receipt of a proper invoice for each reporting period. Appropriate provisions will be included in the contract.

C. INNOVATIONS, INVENTIONS AND PATENTS

(1) PROPRIETARY INFORMATION. Information contained in unsuccessful proposals will remain the property of the proposer. The Government, may, however, retain copies of all proposals. Public release of information in any proposal submitted will be subject to existing statutory and regulatory requirements. If

proprietary information is provided by a proposer in a proposal which constitutes a trade secret, proprietary commercial or financial information, confidential personal information or data affecting the national security, it will be treated in confidence, to the extent permitted by law, provided this information is clearly marked by the proposer with the term "confidential proprietary information" and provided the following legend, which appears on the cover page of the proposal is completed:

"This proposal includes data that shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed-in whole- or in part for any purpose other than to evaluate this proposal. If, however, a contract is awarded to this offeror as a result of-or in connection with the submission of this data, the Government shall have the right to duplicate, use, or disclose the data to the extend provided in the resulting contract. This restriction does not limit the Government's right to use information contained in this data if it is obtained from another source without restriction. The data subject to this restriction are contained in sheets/pages (Insert numbers or other identification of sheets)."

Any other legend may be unacceptable to the Government and may constitute grounds for removing the proposal from further consideration and without assuming any liability for inadvertent disclosure. The Government will limit dissemination of such information to within official channels. Offerors shall limit proprietary information to only that absolutely essential to their proposal.

(2) RIGHTS TO DATA DEVELOPED UNDER SBIR FUNDING AGREEMENTS. The Contractor is authorized to affix the following "SBIR Rights Notice" to SBIR data delivered under this contract and the Government will thereafter treat the data within the provisions of FAR 52.227-20, RIGHTS IN DATA--SBIR PROGRAM (March 1994). If the Contractor does not affix the Notice to data delivered to the Government in performance of the contract, the Government shall have unlimited rights to all data delivered, except for copyright data approved by the Contracting Officer and registered under U.S.C. 401 or 402. If the claim to copyright data is made, the Contractor shall affix the applicable copyright notice. The SBIR RIGHTS NOTICE (MAR 1994) is as follows:

"These SBIR data are furnished with SBIR rights under Contract No. ______. For a period of 4 years after acceptance of all items to be delivered under this contract,

the Government agrees to use these data for Government purposes only, and they shall not be disclosed outside the Government (including disclosure for procurement purposes) during such period without permission of the contractor, except that, subject to the foregoing use and disclosure prohibitions, such data may be disclosed for use by support Contractors. After the aforesaid 4-year period, the Government has a royalty-free license to use, and to authorize others to use on its behalf, these data for Government purposes, but is relieved of all disclosure prohibitions and assumes no liability for unauthorized use of these data by third parties. This following Notice shall be affixed to any reproductions of these data, in whole or in part."

- (3) COPYRIGHTS. With prior written permission of the Contracting Officer, the awardee normally may copyright and publish (consistent with appropriate national security considerations, if any) material developed with EPA support. EPA receives a royalty-free license for the Federal Government and requires that each publication contain an appropriate acknowledgment and disclaimer statement.
- (4) PATENTS. Small business concerns normally may retain the principal worldwide patent rights to any invention developed with Government support. The Government receives a royalty free license for Federal Government use, reserves the right to require the patent holder to license others in certain circumstances, and requires that anyone exclusively licensed to sell the invention in the United States must normally manufacture it domestically. To the extent authorized by 35 U.S.C. 205, the Government will not make public any information disclosing a Government-supported invention for a four-year period to allow the awardee a reasonable time to pursue a patent.

D. COST SHARING

Cost sharing is permitted for proposals under this Program Solicitation; however, cost sharing is not required nor will it be an evaluation factor in consideration of your proposal.

E. FEE OR PROFIT

Reasonable fee (estimated profit) will be considered under this solicitation. For guidance purposes, the amount of profit normally should not exceed 10% of total project costs.

F. JOINT VENTURES OR LIMITED PARTNERSHIPS

Joint ventures and limited partnerships are eligible provided the entity created qualifies as a small business as defined in this Program Solicitation.

G. RESEARCH AND ANALYTICAL WORK

For Phase II a minimum of one-half of the research and/or analytical effort must be performed by the proposing firm unless otherwise approved in writing by the Contracting Officer.

H. CONTRACTOR COMMITMENTS

Upon award of a funding agreement, the awardee will be required to make certain legal commitments through acceptance of numerous clauses in Phase II funding agreements. The outline that follows is illustrative of the types of clauses to which the Contractor would be committed. This list should not be understood to represent a complete list of clauses to be included in Phase II funding agreements, nor to be specific wording of such clauses. Copies of complete terms and conditions are available upon request.

- (1) INSPECTION. Work performed under the contract is subject to Government inspection and evaluation at all times.
- (2) EXAMINATION OF RECORDS. The Comptroller General (or a duly authorized representative) shall have the right to examine any directly pertinent records of the awardee involving transactions related to this contract.
- (3) DEFAULT. The Government may terminate the contract if the Contractor fails to perform the work contracted.
- (4) TERMINATION FOR CONVENIENCE. The contract may be terminated at any time by the Government if it deems termination to be in its best interest, in which case the Contractor will be compensated for work performed and for reasonable termination costs.
- (5) DISPUTES. Any dispute concerning the funding agreement that cannot be resolved by agreement shall be decided by the Contracting Officer with right of appeal.
- (6) EQUAL OPPORTUNITY. The awardee will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin.
- (7) AFFIRMATIVE ACTION FOR VETERANS. The awardee will not

discriminate against any employee or application for employment because he or she is a disabled veteran or veteran of the Vietnam era.

- (8) AFFIRMATIVE ACTION FOR HANDICAPPED. The awardee will not discriminate against any employee or applicant for employment because he or she is physically or mentally handicapped.
- (9) OFFICIALS NOT TO BENEFIT. No Government official shall benefit personally from the contract.
- (10) COVENANT AGAINST CONTINGENT FEES. No person or agency has been employed to solicit or secure the contract upon an understanding for compensation except bonafide employees or commercial agencies maintained by the Contractor for the purpose of securing business.
- (11) GRATUITIES. The contract may be terminated by the Government if any gratuities have been offered to any representative of the Government to secure the contract.
- (12) PATENT AND COPYRIGHT INFRINGEMENT. The Contractor shall report each notice or claim of patent or copyright infringement based on the performance of the contract.
- (13) AMERICAN MADE EQUIPMENT AND PRODUCTS. When purchasing equipment or a product under the SBIR funding agreement, purchase only American-made items whenever possible.

VII. ADDITIONAL CONTRACT INFORMATION

- (1) The Program Solicitation is intended for informational purposes and reflects current planning. If there is any inconsistency between the information contained herein and the terms of any resulting SBIR funding agreement, the terms of the funding agreement are controlling.
- (2) Before award of an SBIR funding agreement, the Government may request the offeror to submit certain organizational, management, personnel, and financial information to assure responsibility of the offeror.
- (3) The Government is not responsible for any monies expended by the offeror before award of any funding agreement.
- (4) This Program Solicitation is not an offer by the Government and does not obligate the Government to make any specific number of awards. Also, awards under the SBIR program are contingent

upon the availability of funds.

- (5) The SBIR program is not a substitute for existing unsolicited proposal mechanisms. Unsolicited proposals shall not be accepted under the SBIR program in either Phase I or Phase II.
- (6) If an award is made pursuant to a proposal submitted under this Program Solicitation, the Contractor will be required to certify that he or she has not previously been, nor is currently being, paid for essentially equivalent work by any agency of the Federal Government.
- (7) EVALUATION OF OPTIONS EXERCISED AT TIME OF CONTRACT AWARD, FAR 52.217-4 (June 1988). Except when it is determined in accordance with FAR 17.206(b) not to be in the Government's best interests, the Government will evaluate the total price for the basic requirement together with the basic option(s) exercised at the time of award.
- (8) EVALUATION OF OPTIONS, FAR 52.217-5 (July 1990). Except when it is determined in accordance with FAR 17.206(b) not to be in the Government's best interests, the Government will evaluate offers for award purposes by adding the total price for all options to the total price for the basic requirement. Evaluation of options will not obligate the Government to exercise the option(s).
- (9) OPTION FOR INCREASED QUANTITY-SEPARATELY PRICED LINE ITEM, FAR 52.217-7 (March 1989). The Government may require the delivery of the numbered line item, identified in the Schedule as an option item, in the quantity and at the price stated in the Schedule. The Contracting Officer may exercise the option by written notice to the Contractor within the first 15 months of the period of performance. Delivery of added items shall continue at the same rate that like items are called for under the contract, unless the parties otherwise agree.
- (10) Instructions to Offerors Competitive Acquisition, FAR 52.215-1 (Feb 2000).
- (a) Definitions. As used in this provision- Discussions are negotiations that occur after establishment of the competitive range that may, at the Contracting Officer's discretion, result in the offeror being allowed to revise its proposal.

In writing or written means any worded or numbered expression which can be read, reproduced, and later communicated, and includes electronically transmitted and stored information.

Proposal modification is a change made to a proposal before the solicitation's closing date and time, or made in response to an amendment, or made to correct a mistake at any time before award.

Proposal revision is a change to a proposal made after the solicitation closing date, at the request of or as allowed by a Contracting Officer as the result of negotiations.

Time, if stated as a number of days, is calculated using calendar days, unless otherwise specified, and will include Saturdays, Sundays, and legal holidays. However, if the last day falls on a Saturday, Sunday, or legal holiday, then the period shall include the next working day.

- (b) Amendments to solicitations. If this solicitation is amended, all terms and conditions that are not amended remain unchanged. Offerors shall acknowledge receipt of any amendment to this solicitation by the date and time specified in the amendment(s).
- (c) Submission, modification, revision, and withdrawal of proposals. (1) Unless other methods (e.g., electronic commerce or facsimile) are permitted in the solicitation, proposals and modifications to proposals shall be submitted in paper media in sealed envelopes or packages (i) addressed to the office specified in the solicitation, and (ii) showing the time and date specified for receipt, the solicitation number, and the name and address of the offeror. Offerors using commercial carriers should ensure that the proposal is marked on the outermost wrapper with the information in paragraphs (c)(1)(i) and (c)(1)(ii) of this provision.
 - (2) The first page of the proposal must show-
 - (i) The solicitation number;
- (ii) The name, address, and telephone and facsimile numbers of the offeror (and electronic address if available);
- (iii) A statement specifying the extent of agreement with all terms, conditions, and provisions included in the solicitation and agreement to furnish any or all items upon which prices are offered at the price set opposite each item;
- (iv) Names, titles, and telephone and facsimile numbers (and electronic addresses if available) of persons authorized to negotiate on the offeror's behalf with the Government in

- (v) Name, title, and signature of person authorized to sign the proposal. Proposals signed by an agent shall be accompanied by evidence of that agent's authority, unless that evidence has been previously furnished to the issuing office.
- (3) Submission, modification, revision, and withdrawal of proposals. (i) Offerors are responsible for submitting proposals, and any modifications or revisions so as to reach the Government office designated in the solicitation by the time specified in the solicitation. If no time is specified in the solicitation, the time for receipt is 4:30 p.m., local time, for the designated Government office on the date that proposal or revision is due.
- (ii)(A) Any proposal, modification or revision received at the Government office designated in the solicitation after the exact time specified for receipt of offers is "late" and will not be considered unless it is received before award is made, the Contracting Officer determines that accepting the late offer would not unduly delay the acquisition; and--
- (1) If it was transmitted through an electronic commerce method authorized by the solicitation, it was received at the initial point of entry to the Government infrastructure not later than 5:00 p.m. one working day prior to the date specified for receipt of proposals; or
- (2) There is acceptable evidence to establish that it was received at the Government installation designated for receipt of offers and was under the Government's control prior to the time set for receipt of offers; or
 - (3) It is the only proposal received.
- (B) However, a late modification of an otherwise successful proposal that makes its terms more favorable to the Government, will be considered at any time it is received and may be accepted.
- (iii) Acceptable evidence to establish the time of receipt at the Government installation includes the time/date stamp of that installation on the proposal wrapper, other documentary evidence of receipt maintained by the installation, or oral testimony or statements of Government personnel.
- (iv) If an emergency or unanticipated event interrupts normal Government processes so that proposals cannot be received

at the office designated for receipt of proposals by the exact time specified in the solicitation, and urgent Government requirements preclude amendment of the solicitation, the time specified for receipt of proposals will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which normal Government processes resume.

- (v) Proposals may be withdrawn by written notice received at any time before award. Oral proposals in response to oral solicitations may be withdrawn orally. If the solicitation authorizes facsimile proposals, proposals may be withdrawn via facsimile received at any time before award, subject to the conditions specified in the provision at 52.215-5, Facsimile Proposals (Oct. 1997). Proposals may be withdrawn in person by an offeror or an authorized representative, if the identity of the person requesting withdrawal is established and the person signs a receipt for the proposal before award.
- (4) Unless otherwise specified in the solicitation, the offeror may propose to provide any item or combination of items.
- (5) Offerors shall submit proposals in response to this solicitation in English, unless otherwise permitted by the solicitation, and in U.S. dollars, unless the provision at FAR 52.225-17, Evaluation of Foreign Currency Offers (Feb. 2000), is included in the solicitation.
- (6) Offerors may submit modifications to their proposals at any time before the solicitation closing date and time, and may submit modifications in response to an amendment, or to correct a mistake at any time before award.
- (7) Offerors may submit revised proposals only if requested or allowed by the Contracting Officer.
- (8) Proposals may be withdrawn at any time before award. Withdrawals are effective upon receipt of notice by the Contracting Officer.
- (d) Offer expiration date. Proposals in response to this solicitation will be valid for the number of days specified on the solicitation cover sheet (unless a different period is proposed by the offeror).
- (e) Restriction on disclosure and use of data. Offerors that include in their proposals data that they do not want disclosed to the public for any purpose, or used by the Government except for evaluation purposes, shall-

- (1) Mark the title page with the following legend: This proposal includes data that shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed-in whole or in part-for any purpose other than to evaluate this proposal. If, however, a contract is awarded to this offeror as a result of-or in connection with-the submission of this data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit the Government's right to use information contained in this data if it is obtained from another source without restriction. The data subject to this restriction are contained in sheets [insert numbers or other identification of sheets]; and
- (2) Mark each sheet of data it wishes to restrict with the following legend: Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.
- (f) Contract award. (1) The Government intends to award a contract or contracts resulting from this solicitation to the responsible offeror(s) whose proposal(s) represents the best value after evaluation in accordance with the factors and subfactors in the solicitation.
- (2) The Government may reject any or all proposals if such action is in the Government's interest.
- (3) The Government may waive informalities and minor irregularities in proposals received.
- (4) The Government intends to evaluate proposals and award a contract without discussions with offerors (except clarifications as described in FAR 15.306(a)). Therefore, the offeror's initial proposal should contain the offeror's best terms from a cost or price and technical standpoint. The Government reserves the right to conduct discussions if the Contracting Officer later determines them to be necessary. If the Contracting Officer determines that the number of proposals that would otherwise be in the competitive range exceeds the number at which an efficient competition can be conducted, the Contracting Officer may limit the number of proposals in the competitive range to the greatest number that will permit an efficient competition among the most highly rated proposals.
- (5) The Government reserves the right to make an award on any item for a quantity less than the quantity offered, at the unit cost or prices offered, unless the offeror specifies

otherwise in the proposal.

- (6) The Government reserves the right to make multiple awards if, after considering the additional administrative costs, it is in the Government's best interest to do so.
- (7) Exchanges with offerors after receipt of a proposal do not constitute a rejection or counteroffer by the Government.
- (8) The Government may determine that a proposal is unacceptable if the prices proposed are materially unbalanced between line items or subline items. Unbalanced pricing exists when, despite an acceptable total evaluated price, the price of one or more contract line items is significantly overstated or understated as indicated by the application of cost or price analysis techniques. A proposal may be rejected if the Contracting Officer determines that the lack of balance poses an unacceptable risk to the Government.
- (9) If a cost realism analysis is performed, cost realism may be considered by the source selection authority in evaluating performance or schedule risk.
- (10) A written award or acceptance of proposal mailed or otherwise furnished to the successful offeror within the time specified in the proposal shall result in a binding contract without further action by either party.
- (11) The Government may disclose the following information in postaward debriefings to other offerors:
- (i) The overall evaluated cost or price and technical rating of the successful offeror;
- (ii) The overall ranking of all offerors, when any ranking was developed by the agency during source selection;
 - (iii) A summary of the rationale for award; and
- (iv) For acquisitions of commercial items, the make and model of the item to be delivered by the successful offeror.

VIII. SUBMISSION OF PROPOSALS

Your proposal with an **original and nine (9) copies** (including all appendices) shall be received at one of the following addresses by **4:30 p.m. local time**, on April 19, 2001.

U.S. MAIL:

Attention: Marsha Johnson, SBIR Phase II U.S. Environmental Protection Agency Contracts Management Division (MD-33) Research Triangle Park, N.C. 27711

HAND-CARRIED/COURIER ADDRESS:

Attention: Marsha Johnson, SBIR Phase II U.S. Environmental Protection Agency Administration Building Lobby Contracts Management Division 79 T.W. Alexander Drive Research Triangle Park, N.C. 27709

*** IMPORTANT ***

Please note Section VII, Paragraph 10(c)(3), FAR 52.215-1(c)(3), "Instructions to Offerors - Competitive Acquisition" concerning Late Proposals, Modifications of Proposals and Withdrawal of Proposals.

Please do not use special bindings or covers. Staple the pages in the upper left corner of the cover sheet of each proposal. All copies of a proposal shall be sent in the same package. The proposal should be self-contained with all appendices and written with the care and thoughtfulness accorded papers for publication.

IX. SUBMISSION OF OPTIONAL FUNDING LETTER/DOCUMENTATION:

All documentation required as evidence of third party funding in order to receive consideration for the option funding shall be submitted by 4:30 p.m. local time, on July 31, 2002.

One original set of the documentation shall be submitted to EPA Contracts Management Division at the appropriate address listed above in Section VIII.

One duplicate copy of the documentation shall also be submitted to the SBIR Program Manager at the appropriate address listed below:

U.S. Mail:

Attention: Dr. Jim Gallup U.S. Environmental Protection Agency ORD/NCER (8722R) 1200 Pennsylvania Avenue, N.W. Washington, DC 20460

Handcarried/Courier Address:

Attention: Dr. Jim Gallup U.S. Environmental Protection Agency 1300 Pennsylvania Avenue, N.W. ORD/NCER (8722R), Room 51161 Washington, DC 20004 Telephone: (202) 564-6823

X. SUBMISSION FORMS AND CERTIFICATIONS

Appendix 5:

Forms are not attached for the first three proposal attachments: Attachment 1 (Phase I Final Report); Attachment 2 (Commercialization Plan); and Attachment 3 (Phase II Quality Assurance Plan). Attached to this solicitation are the following forms:

Appendix 1: Proposal Cover Sheet (Number as Page 1)
Appendix 2: Project Summary (Number as Page 2)
Appendix 3: SBIR Proposal Summary Budget

Appendix 3-A: SBIR Option Proposal Summary Budget
Appendix 4: Representations and Certifications Cover sheet

Representations, Certifications and $% \frac{1}{2}\left(\frac{1}{2}\right) =\frac{1}{2}\left(\frac{1}{2}\right) +\frac{1}{2}\left(\frac$

Other Statements of Offerors

Include Appendix 1 as the first page of your proposal and Appendix 2 as the second page of your proposal. If you are submitting an Option proposal, include Appendix 3-A immediately following Appendix 3. The purpose of these forms is to meet the mandate of law or regulation and simplify the submission of proposals.

Appendix 1: PROPOSAL COVER SHEET U.S. Environmental Protection Agency, SMALL BUSINESS INNOVATION RESEARCH PHASE II SOLICITATION NO. PR-NC-01-11634

PHASE I TOPIC		
PROPOSAL TITLE		
FIRM NAME:		
MAILING ADDRESS:		
CITY:	STATE:	ZIP:
AMOUNT REQUESTED:\$	PROPOSED DURATION	I (PHASE II): 2 YEARS
(Not to Exceed \$225,000)		
*******Proposals submitted in response to	this solicitation will be va	lid for 150 days*****
ARE YOU APPLYING FOR THE PHASE II COMMERCIALD PHASE	ZATION OPTION? (Y) OR (N)	
CERTIFICATIONS AND AUTHORIZATIONS: Answer Y	Yes) or N(No)	
1. The above concern certifies that it is stated in the program solicitation2. The above concern certifies that a mir		
will be performed by the proposing firm.	irmam or 1/2 or one research	and, or analycical crioic
3. If the proposal does not result in an title and technical abstract page of your pronumber of the official of the proposing firm	pposed project, and the name,	
4. The above concern certifies that it is	s a woman owned small busines	s concern and meets the
definition as stated in the program solicitat		
5. The above concern certifies that it is		
business concern and meets the definition as		
6. Do you plan to send, or have you sent,		
agency? If yes, which? Use acronym(s) for each	ch agency, (e.g., DOD, NIH, D	OE, NASA,
etc.)	harmon Occasionation manage	
7. Choose one of the following to descri		
IndividualPartnershipCorpor		Dun S
8. Provide the following information: The Bradstreet Number:Comm		Duii &
Bradstreet Number:Com	ion farent Name	
* For information purposes only.		
The Offeror is in full agreement with the ter- solicitation, as evidenced by signatures belo		s included in this
ENDORS	EMENTS	
Authorized Negotiator:	Person Authorized to	Sign Proposal:
Print Name:	Print Name:	
Title:	Title:	
Telephone:	Telephone:	
Fax:	Fax:	
Email:	Email:	
Signature:	Signature:	
Date:	Date:	

PROPRIETARY NOTICE: For any other purpose than to evaluate the proposal, this data shall not be disclosed outside the Government and shall not be duplicated, used or disclosed in whole or in part, provided that if a funding agreement is awarded to this offeror as a result of or in connection with the submission of this data the Government shall have the right to duplicate, use or disclose the data to the extent provided in the funding agreement. This restriction does not limit the Government's right to use information contained in the data if it is obtained from another source without restriction. The data in this proposal subject to this restriction is contained on pages ______ of this proposal.

Appendix 2

U.S. ENVIRONMENTAL PROTECTION AGENCY SMALL BUSINESS INNOVATION RESEARCH PROGRAM SOLICITATION NUMBER PR-NC-01-11634 PHASE II

PROJECT SUMMARY (Limit to One Page)

FIRM NAME, ADDRESS, TELEPHONE AND FAX NUMBER, AND E-MAIL ADDRESS:

Firm Name: Telephone: Address:

Fax: E-mail:

TITLE OF PROPOSAL:

TOPIC LETTER AND DESCRIPTION:

NAME AND TITLE OF PRINCIPAL INVESTIGATOR/PROJECT MANAGER:

TECHNICAL ABSTRACT, RESULTS, AND POTENTIAL COMMERCIAL APPLICATION

TECHNICAL ABSTRACT, RESULTS, AND POTENTIAL COMMERCIAL APPLICATION (Limit to 400 Words; Must be Publishable):

Appendix 3 SBIR PROPOSAL SUMMARY BUDGET

(See Instructions on Reverse Side)

		ely) Hours/Est. Rate:			
B. OVERHE	EAD:		_ \$ 		
C. OTHER DIRECT COSTS: (list separately)					
E. CONSUI	ULTANTS: (List Est. Rate and Hours)		\$ 		
F. GENERA	AL AND ADMINISTRATIVE:		 \$ 		
TOTAL COS	STS (Total of A thru F above)				
	T (%) Not to exceed 10% of total pro				
TOTAL PRO	OJECT PRICE (Total costs + Profit)				
PRINT NAM	ME:	TITLE:			
SIGNATURE	E: I	DATE SUBMITTED:			

This proposal is submitted in response to EPA SBIR Program Solicitation No. PR-NC-01-11634 and reflects our best estimate as of this date.

INSTRUCTIONS FOR APPENDIX 3

The purpose of this form is to provide a vehicle whereby the offeror submits to the Government a pricing proposal of estimated costs with detailed information for each cost element, consistent with the offeror's cost accounting system.

- If the completed summary is not self-explanatory and/or does not fully document and justify the amounts requested in each category, such documentation should be contained, as appropriate, on a budget explanation page immediately following the budget in the proposal.
- A. Direct Labor List individually all personnel included, the estimated hours to be expended and the rates of pay (salary, wages, and fringe benefits).
- B. Overhead Specify current rate(s) and base(s). Use current rate(s) negotiated with the cognizant federal negotiating agency, if available. If no rate(s) has (have) been negotiated, a reasonable rate(s) may be requested for Phase I which will be subject to approval by EPA. Offerors may use whatever number and types of overhead rates that are in accordance with their accounting systems and approved by the cognizant federal negotiating agency, if available.
- C. Other Direct Costs List all other direct costs which are not otherwise included in the categories described above, i.e., computer services, publication costs, subcontracts, etc. List each item of permanent equipment to be purchased, its price, and explain its relation to the project.
- D. Travel Address the type and extent of travel and its relation to the project.
- E. Consultants Indicate name, daily compensation, and estimated days of service.
- F. General and Administrative (G&A) Same as B. Above.
- G. Profit Reasonable fee (estimated profit) will be considered under this solicitation. For guidance purposes, the amount of profit normally should not exceed 10% of total project costs.

Appendix 3-A SBIR OPTION PROPOSAL SUMMARY BUDGET

(See Instructions on Reverse Side)

								 			t. Rate:	
В. 	OVERHE											\$
C.	OTHER I	DIRECT	COS'	TS:	(list	separa	ately)	 				
								and or	title			\$
	CONSUL											
F.	GENERA	L AND	ADMI:									\$
TO	TAL COS	TS (To	tal	of A	thru	F abov	ze)					
											\$	
	TAL PRO		RICE	(To	otal c	osts +	Profi	t)				
PR	INT NAM	E:							TITL	E:		
SI	GNATURE	:							DATE	SUBMITTE	:D:	
							-					

This proposal is submitted in response to EPA SBIR Program Solicitation No. PR-NC-01-11634 and reflects our best estimate as of this date.

INSTRUCTIONS FOR APPENDIX 3-A

The purpose of this form is to provide a vehicle whereby the offeror submits to the Government a pricing proposal of estimated costs with detailed information for each cost element, consistent with the offeror's cost accounting system.

- If the completed summary is not self-explanatory and/or does not fully document and justify the amounts requested in each category, such documentation should be contained, as appropriate, on a budget explanation page immediately following the budget in the proposal.
- A. Direct Labor List individually all personnel included, the estimated hours to be expended and the rates of pay (salary, wages, and fringe benefits).
- B. Overhead Specify current rate(s) and base(s). Use current rate(s) negotiated with the cognizant federal negotiating agency, if available. If no rate(s) has (have) been negotiated, a reasonable rate(s) may be requested for Phase I which will be subject to approval by EPA. Offerors may use whatever number and types of overhead rates that are in accordance with their accounting systems and approved by the cognizant federal negotiating agency, if available.
- C. Other Direct Costs List all other direct costs which are not otherwise included in the categories described above, i.e., computer services, publication costs, subcontracts, etc. List each item of permanent equipment to be purchased, its price, and explain its relation to the project.
- D. Travel Address the type and extent of travel and its relation to the project.
- E. Consultants Indicate name, daily compensation, and estimated days of service.
- F. General and Administrative (G&A) Same as B. Above.
- G. Profit Reasonable fee (estimated profit) will be considered under this solicitation. For guidance purposes, the amount of profit normally should not exceed 10% of total project costs.

APPENDIX 4 COVER SHEET REPRESENTATIONS AND CERTIFICATIONS

FIR	M:
	CONGRESSIONAL DISTRICT/DUN AND BRADSTREET NUMBER (RTP-K-1)
A.	Congressional district for offeror's place of business:
	Congressional district for offeror's place(s) of performance
В.	Dun and Bradstreet Number:
С.	Taxpayer ID or SSN#:

APPENDIX 5

REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS OF OFFERORS

K.1 CERTIFICATE OF INDEPENDENT PRICE DETERMINATION (FAR 52.203-2) (APR 1985)

- (a) The offeror certifies that--
- (1) The prices in this offer have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other offeror or competitor relating to (i) those prices, (ii) the intention to submit an offer, or (iii) the methods or factors used to calculate the prices offered;
- (2) The prices in this offer have not been and will not be knowingly disclosed by the offeror, directly or indirectly, to any other offeror or competitor before bid opening (in the case of a sealed bid solicitation) or contract award (in the case of a negotiated solicitation) unless otherwise required by law; and
- (3) No attempt has been made or will be made by the offeror to induce any other concern to submit or not to submit an offer for the purpose of restricting competition.
- (b) Each signature on the offer is considered to be a certification by the signatory that the signatory--
- (1) Is the person in the offeror's organization responsible for determining the prices being offered in this bid or proposal, and that the signatory has not participated and will not participate in any action contrary to subparagraphs (a)(1) through (a)(3) above; or
- (2)(i) Has been authorized, in writing, to act as agent for the following principals in certifying that those principals have not participated, and will not participate in any action contrary to subparagraphs (a)(1) through (a)(3) above

[Insert full name of person(s) in the offeror's organization responsible for determining the prices offered in the bid or proposal, and the title of his or her position in the offeror's

- (ii) As an authorized agent, does certify that the principals named in subdivision (b)(2)(i) above have not participated, and will not participate, in any action contrary to subparagraphs (a)(1) through (a)(3) above; and
- (iii) As an agent, has not personally participated, and will not participate, in any action contrary to subparagraphs (a)(1) through (a)(3) above.
- (c) If the offeror deletes or modifies subparagraph (a)(2) above, the offeror must furnish with its offer a signed statement setting forth in detail the circumstances of the disclosure.

K.2 CONTINGENT FEE REPRESENTATION AND AGREEMENT (FAR 52.203-4) (APR 1984)

(a) Representation. The offeror represents that, except for full-time bona fide employees working solely for the offeror, the offeror--

[Note: The offeror must check the appropriate boxes. For interpretation of the representation, including the term "bona fide employee," see Subpart 3.4 of the Federal Acquisition Regulation.]

- (1) [] has, [] has not employed or retained any person or company to solicit or obtain this contract; and
- (2) [] has, [] has not paid or agreed to pay to any person or company employed or retained to solicit or obtain this contract any commission, percentage, brokerage, or other fee contingent upon or resulting from the award of this contract.
- (b) Agreement. The offeror agrees to provide information relating to the above Representation as requested by the Contracting Officer and, when subparagraph (a)(1) or (a)(2) is answered affirmatively, to promptly submit to the Contracting Officer--
- (1) A completed Standard Form 119, Statement of Contingent or Other Fees, (SF 119); or
- (2) A signed statement indicating that the SF 119 was previously submitted to the same contracting office, including the date and applicable solicitation or contract number, and representing that the prior SF 119 applies to this offer or quotation.

K.3 CERTIFICATION AND DISCLOSURE REGARDING PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (FAR 52.203-11) (APR 1991)

- (a) The definitions and prohibitions contained in the clause, at FAR 52.203-12, Limitation on Payments to Influence Certain Federal Transactions, included in this solicitation, are hereby incorporated by reference in paragraph (b) of this certification.
- (b) The offeror, by signing its offer, hereby certifies to the best of his or her knowledge and belief that on or after December 23, 1989--
- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with this solicitation, the offeror shall complete and submit OMB standard form LLL, Disclosure of Lobbying Activities to the Contracting Officer; and
- (3) He or she will include the language of this certification in all subcontract awards at any tier and require that all recipients of subcontract awards in excess of \$100,000 shall certify and disclose accordingly.
- (c) Submission of this certification and disclosure is a prerequisite for making or entering into this contract imposed by section 1352, title 31, United States Code. Any person who makes an expenditure prohibited under this provision or who fails to file or amend the disclosure form to be filed or amended by this provision, shall be subject to a civil penalty of not less than \$10,000, and not more than \$100,000, for each such failure.

K.4 TAXPAYER IDENTIFICATION (FAR 52.204-3) (OCT 1998)

(a) Definitions.

"Common parent," as used in this provision, means that corporate entity that owns or controls an affiliated group of corporations that files its Federal income tax returns on a consolidated basis, and of which the offeror is a member.

"Taxpayer Identification Number (TIN)," as used in this provision, means the number required by the Internal Revenue Service (IRS) to be used by the offeror in reporting income tax and other returns. The TIN may be either a Social Security Number or an Employer Identification Number.

- (b) All offerors must submit the information required in paragraphs (d) through (f) of this provision to comply with debt collection requirements of 31 U.S.C. 7701(c) and 3325(d), reporting requirements of 26 U.S.C. 6041, 6041A, and 6050M, and implementing regulations issued by the IRS. If the resulting contract is subject to the payment reporting requirements described in Federal Acquisition Regulation (FAR) 4.904, the failure or refusal by the offeror to furnish the information may result in a 31 percent reduction of payments otherwise due under the contract.
- (c) The TIN may be used by the Government to collect and report on any delinquent amounts arising out of the offeror's relationship with the Government (31 U.S.C. 7701(c)(3)). If the resulting contract is subject to the payment reporting requirements described in FAR 4.904, the TIN provided hereunder may be matched with IRS records to verify the accuracy of the offeror's TIN.

(d) Taxpayer	Identification Number (TIN).
[] TIN:	
[] TIN has b	peen applied for.
[] TIN is no	ot required because:
foreign partr connected wit States and does not have	es a nonresident alien, foreign corporation, or nership that does not have income effectively the the conduct of a trade or business in the United ean office or place of business or a fiscal paying United States;
[] Offeror i government;	s an agency or instrumentality of a foreign
[] Offeror i	s an agency or instrumentality of the Federal
(e) Type of c	organization.
[] Sole prop	orietorship;
[] Partnersh	nip;
[] Corporate	e entity (not tax-exempt);

[] Corporate entity (tax-exempt);
[] Government entity (Federal, State, or local);
[] Foreign government;
[] International organization per 26 CFR 1.6049-4;
[] Other
(f) Common parent.
[] Offeror is not owned or controlled by a common parent as defined in paragraph (a) of this provision.
[] Name and TIN of common parent:
Name
TIN
K.5 CERTIFICATION REGARDING DEBARMENT, SUSPENSION, PROPOSED DEBARMENT, AND OTHER RESPONSIBILITY MATTERS (FAR 52.209-5) (MAR 1996)
(a)(1) The Offeror certifies, to the best of its knowledge and belief, that -
(i) The Offeror and/or any of its Principals -
<pre>(A) Are () are not () presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency;</pre>
(B) Have () have not (), within a 3-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and
(C) Are () are not () presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in subdivision $(a)(1)(i)(B)$ of this provision.
(ii) The Offeror has () has not (), within a 3-year

period preceding this offer, had one or more contracts terminated for default by any Federal agency.

(2) "Principals," for the purposes of this certification, means officers; directors; owners; partners; and, persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions).

THIS CERTIFICATION CONCERNS A MATTER WITHIN THE JURISDICTION OF AN AGENCY OF THE UNITED STATES AND THE MAKING OF A FALSE, FICTITIOUS, OR FRAUDULENT CERTIFICATION MAY RENDER THE MAKER SUBJECT TO PROSECUTION UNDER SECTION 1001, TITLE 18, UNITED STATES CODE.

- (b) The Offeror shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Offeror learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- (c) A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Offeror's responsibility. Failure of the Offeror to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Offeror nonresponsible.
- (d) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of an Offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- (e) The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Offeror knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

K.6 PLACE OF PERFORMANCE (FAR 52.215-6) (OCT 1997)

(a) The offeror or respondent, in the performance of any contract resulting from this solicitation, ${\bf G}$ intends, ${\bf G}$ does not intend [check applicable block] to use one or more plants or facilities located at a different address from the address of the offeror or respondent as indicated in this proposal or response to request for information.

(b) If the offeror or respondent checks "intends" in paragraph (a) of this provision, it shall insert in the following spaces the required information:

Place of Performance	Name and Address of Owner
(Street Address, City,	and Operator of the Plant
State, County, Zip Code)	or Facility if Other than Offeror or Respondent
	

K.7 SMALL BUSINESS PROGRAM REPRESENTATIONS (FAR 52.219-1) (OCT 2000) ALTERNATE II (OCT 2000)

- (a)(1) The North American Industry Classification System (NAICS) code for this acquisition is 541710.
 - (2) The small business size standard is 500 employees.
- (3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.
- (b) Representations. (1) The offeror represents as part of its offer that it []is, []is not a small business concern.
- (2) [Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.] The offeror represents, for general statistical purposes, that it []is, []is not, a small disadvantaged business concern as defined in 13 CFR 124.1002.
- (3) [Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.] The offeror represents as part of its offer that it []is, []is not a women-owned small business concern.
- (4) [Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.] The offeror represents as part of its offer that it is, is not a veteran-owned small business concern.
- (5) [Complete only if the offeror represented itself as a veteran-owned small business concern in paragraph (b)(4) of this provision.] The offeror represents as part of its offer that it is, is not a service-disabled veteran-owned small business concern.
- (7) [Complete if offeror represented itself as disadvantaged in paragraph (b)(2) of this provision.] The offeror shall check

the category in which its ownership falls:
Black American.
Hispanic American.
Native American (American Indians, Eskimos, Aleuts, or Native Hawaiians).
Asian-Pacific American (persons with origins from Burma, Thailand, Malaysia, Indonesia, Singapore, Brunei, Japan, China, Taiwan, Laos, Cambodia (Kampuchea), Vietnam, Korea, The Philippines, U.S. Trust Territory of the Pacific Islands (Republic of Palau), Republic of the Marshall Islands, Federated States of Micronesia, the Commonwealth of the Northern Mariana Islands, Guam, Samoa, Macao, Hong Kong, Fiji, Tonga, Kiribati, Tuvalu, or Nauru).
Subcontinent Asian (Asian-Indian) American (persons with origins from India, Pakistan, Bangladesh, Sri Lanka, Bhutan, the Maldives Islands, or Nepal).
Individual/concern, other than one of the preceding.
(c) Definitions. As used in this provision
"Service-disabled veteran-owned small business concern"
(1) Means a small business concern

- (i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and
- (ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.
- (2) Service-disabled veteran means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).

"Small business concern," means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR Part 121 and the size standard in paragraph (a) of this provision.

"Veteran-owned small business concern" means a small business concern--

- (1) Not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and
- (2) The management and daily business operations of which are controlled by one or more veterans.

"Women-owned small business concern," means a small business concern--

- (1) Which is at least 51 percent owned by one or more women or, in the case of any publicly owned business, at east 51 percent of the stock of which is owned by one or more women; and
- (2) Whose management and daily business operations are controlled by one or more women.
- (d) Notice. (1) If this solicitation is for supplies and has been set aside, in whole or in part, for small business concerns, then the clause in this solicitation providing notice of the set-aside contains restrictions on the source of the end items to be furnished.
- (2) Under 15 U.S.C. 645(d), any person who misrepresents a firm's status as a small, HUBZone small, small disadvantaged, or women-owned small business concern in order to obtain a contract to be awarded under the preference programs established pursuant to section 8(a), 8(d), 9, or 15 of the Small Business Act or any other provision of Federal law that specifically references section
- 8(d) for a definition of program eligibility, shall--
 - (i) Be punished by imposition of fine, imprisonment, or both;
 - (ii) Be subject to administrative remedies, including suspension and debarment; and
 - (iii) Be ineligible for participation in programs conducted under the authority of the Act.

K.8 SMALL DISADVANTAGED BUSINESS STATUS (FAR 52.219-22) (OCT 1999)

(a) General. This provision is used to assess an offeror's small disadvantaged business status for the purpose of obtaining a benefit on this solicitation. Status as a small business and status as a small disadvantaged business for general statistical purposes is covered by the provision at FAR 52.219-1, Small Business Program Representation.

- (b) Representations.(1) General. The offeror represents, as part of its offer, that it is a small business under the size standard applicable to this acquisition; and either--
- [] (i) It has received certification by the Small Business Administration as a small disadvantaged business concern consistent with 13 CFR 124, Subpart B; and
- (A) No material change in disadvantaged ownership and control has occurred since its certification;
- (B) Where the concern is owned by one or more disadvantaged individuals, the net worth of each individual upon whom the certification is based does not exceed \$750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); and
- (C) It is identified, on the date of its representation, as a certified small disadvantaged business concern in the database maintained by the Small Business Administration (PRO-Net); or
- [] (ii) It has submitted a completed application to the Small Business Administration or a Private Certifier to be certified as a small disadvantaged business concern in accordance with 13 CFR 124, Subpart B, and a decision on that application is pending, and that no material change in disadvantaged ownership and control has occurred since its application was submitted.
- (2) [] For Joint Ventures. The offeror represents, as part of its offer, that it is a joint venture that complies with the requirements at 13 CFR 124.1002(f) and that the representation in paragraph (b)(1) of this provision is accurate for the small disadvantaged business concern that is participating in the joint venture. [The offeror shall enter the name of the small disadvantaged business concern that is participating in the joint venture: ______.]
- (c) Penalties and Remedies. Anyone who misrepresents any aspects of the disadvantaged status of a concern for the purposes of securing a contract or subcontract shall:
- (1) Be punished by imposition of a fine, imprisonment, or both;
- (2) Be subject to administrative remedies, including suspension and debarment; and
- (3) Be ineligible for participation in programs conducted under the authority of the Small Business Act.

K.9 PROHIBITION OF SEGREGATED FACILITIES (FAR 52.222-21) (FEB

- (a) "Segregated facilities," as used in this clause, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees, that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, sex, or national origin because of written or oral policies or employee custom. The term does not include separate or single-user rest rooms or necessary dressing or sleeping areas provided to assure privacy between the sexes.
- (b) The Contractor agrees that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Contractor agrees that a breach of this clause is a violation of the Equal Opportunity clause in this contract.
- (c) The Contractor shall include this clause in every subcontract and purchase order that is subject to the Equal Opportunity clause of this contract.

The offeror represents that--

- (a) It [] has, [] has not participated in a previous contract or subcontract subject to the Equal Opportunity clause of this solicitation;
- (b) It [] has, [] has not filed all required compliance
 reports; and
- (c) Representations indicating submission of required compliance reports, signed by proposed subcontractors, will be obtained before subcontract awards.

K.11 AFFIRMATIVE ACTION COMPLIANCE (FAR 52.222-25) (APR 1984)

The offeror represents that--

(a) It [] has developed and has on file, [] has not developed and does not have on file, at each establishment, affirmative action programs required by the rules and regulations of the Secretary of Labor (41 CFR 60-1 and 60-2), or (b) It [] has not

previously had contracts subject to the written affirmative action programs requirement of the rules and regulations of the Secretary of Labor.

K.12 RECOVERED MATERIAL CERTIFICATION (FAR 52.223-4) (OCT 1997)

As required by the Resource Conservation and Recovery Act of 1976 (42 U.S.C. 6962(c)(3)(A)(i)), the offeror certifies, by signing this offer, that the percentage of recovered material to be used in the performance of the contract will be at least the amount required by the applicable contract specifications.

K.13 ESTIMATE OF PERCENTAGE OF RECOVERED MATERIAL FOR DESIGNATED ITEMS TO BE USED IN THE PERFORMANCE OF THE CONTRACT (FAR 52.223-8) (MAY 1995)

(a) By signing this offer, the offeror estimates that the total percentage(s) of recovered material for EPA Designated Items (see 40 CFR, Chapter 1, Subchapter I) to be used in the products and services to be provided under the terms and specifications set forth in this solicitation shall be as follows:

ITEM	ESTIMATED PERCENTAGE OF RECOVERED MATERIAL*

- *In addition, for paper products, include the percentage of postconsumer material.
- (b) Prospective offerors are cautioned that the Government will conclude that the percentages(s) of recovered materials to be used in products and services to be provided under any resulting contract shall be "0%" if the estimate(s) requested in this solicitation provision are left blank.
- (c) Prospective offerors are further cautioned that estimated percentage(s) of recovered materials to be used in products and services to be provided under any resulting contract that are less than the requirements set forth in this solicitation may render a prospective offeror's offer nonresponsive.

K.14 CERTIFICATION OF TOXIC CHEMICAL RELEASE REPORTING (FAR 52.223-13) (OCT 2000)

- (a) Submission of this certification is a prerequisite for making or entering into this contract imposed by Executive Order 12969, August 8, 1995.
 - (b) By signing this offer, the offeror certifies that--
 - (1) As the owner or operator of facilities that will be used

in the performance of this contract that are subject to the filing and reporting requirements described in section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023) and section 6607 of the Pollution Prevention Act of 1990(PPA) (42 U.S.C. 13106), the offeror will file and continue to file for such facilities for the life of the contract the Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of EPCRA and section 6607 of PPA; or

- (2) None of its owned or operated facilities to be used in the performance of this contract is subject to the Form R filing and reporting requirements because each such facility is exempt for at least one of the following reasons: [Check each block that is applicable.]
- [] (i) The facility does not manufacture, process, or otherwise use any toxic chemicals listed under section 313(c) of EPCRA, 42 U.S.C. 11023(c);
- [] (ii) The facility does not have 10 or more full-time employees as specified in section 313(b)(1)(A) of EPCRA, 42 U.S.C. 11023(b)(1)(A);
- [] (iii) The facility does not meet the reporting thresholds of toxic chemicals established under section 313(f) of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);
- [] (iv) The facility does not fall within Standard Industrial Classification Code (SIC) major groups 20 through 39 or their corresponding North American Industry Classification System (NAICS) sectors 31 through 33; or
- [] (v) The facility is not located within any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, or any other territory or possession over which the United States has jurisdiction.

K.15 BUSINESS OWNERSHIP REPRESENTATION (EPAAR 1552.204-70) (JAN 2001)

The successful awardee should check one or more of the categories below that represents its business ownership and return this information to the contracting officer within ten (10) calendar days after award. Completion of this clause by the successful awardee is voluntary.

"Ownership," as used in this clause, means: (a) At least 51 percent of the concern is owned by one or more individuals from a category listed below; or, in the case of any publicly owned

business, at least 51 percent of the stock of the concern is owned by one or more such individuals; and (b) The management and daily business operations of the concern are controlled by one or more such individuals.

		LC.	ity				
			Hispanic Not Hispa				
Ι	Race						
]]	American Asian or Black or White.	Pacific	Islande	c.	Aleut

K.16 ORGANIZATIONAL CONFLICT OF INTEREST CERTIFICATION (EPAAR 1552.209-72) (APR 1984)

The offeror [] is [] is not aware of any information bearing on the existence of any potential organizational conflict of interest. If the offeror is aware of information bearing on whether a potential conflict may exist, the offeror shall provide a disclosure statement describing this information. (See Section L of the solicitation for further information.)

K.17 SOCIAL SECURITY NUMBERS OF CONSULTANTS AND CERTAIN SOLE PROPRIETORS AND PRIVACY ACT STATEMENT (EPAAR 1552.224-70) (APR 1984)

- (a) Section 6041 of Title 26 of the U.S. Code requires EPA to file Internal Revenue Service (IRS) Form 1099 with respect to individuals who receive payments from EPA under purchase orders or contracts. Section 6109 of Title 26 of the U.S. Code authorizes collection by EPA of the social security numbers of such individuals for the purpose of filing IRS Form 1099. Social security numbers obtained for this purpose will be used by EPA for the sole purpose of filing IRS Form 1099 in compliance with Section 6041 of Title 26 of the U.S. Code.
- (b) If the offeror or quoter is an individual, consultant, or sole proprietor and has no Employer Identification Number, insert the offeror's or quoter's social security number on the following line.

K.18 SIGNATURE BLOCK (EP 52.299-900) (APR 1984)

I hereby certify that the responses to the above Representations, Certifications and other statements are accurate

and complete.
Signature:
Title :
Date :
K.19 COMPLIANCE WITH VETERANS EMPLOYMENT REPORTING REQUIREMENTS (EP-S 99-1) (FEB 1999) DEVIATION
(a) The Offeror represents that, if it is subject to the reporting requirements of 38 U.S.C. 4212(d) (i.e. the VETS-100 report required by the Federal Acquisition Regulation clause 52.222-37, Employment Reports on Disabled Veterans and Veterans of the Vietnam Era), it has[], has not[] submitted the most recent report required by 38 U.S.C. 4212(d).
(b) An Offeror who checks "has not" may not be awarded a contract until the required reports are filed. (31 U.S.C. 1354)
K.20 CONGRESSIONAL DISTRICT/DUN AND BRADSTREET NUMBER (RTP-K-1)
A. Congressional district for offeror's place of business (as noted on the SF1411):
Congressional district for offeror's place(s) of performance:
B. Dun and Bradstreet Number: